These are but trifling errors it is true, but the book would be none the worse if they were corrected. Sir Henry Thompson's work is already, as we have said, classical; and it is but just to add, generally written with elegance and precision. For this very reason its occasional slight defects are the more observable.

In taking leave of the third edition of Sir Henry Thompson's work we cannot express our appreciation of it better than by quoting the final sentence of the notice of its second edition, published in the number of this Journal for January, 1862 (page 206) :—

"In its present state the work . . . . is by far the best with which we are acquainted, in any language, on the important subjects of which it treats; and we take sincere pleasure in calling to it the attention of the profession." J. A., JR.

ART. XXVIII.—*Lectures on the Theory and Practice of the Ophthalmoscope.* By HENRY WILSON, F.R.C.S., M.R.I.A., Licentiate of the King and Queen's Coll. of Phys. in Ireland, Assist. Surg. to St. Mark's Ophthalmic Hospital, etc. 8vo. pp. 148. Dublin: Fannin & Co., 41 Grafton St. London: Longman & Co., 1868.

THE value of the ophthalmoscope in ocular and cerebral affections is daily becoming more generally acknowledged, and the time is not distant when that instrument will be considered as imperatively necessary for the diagnosis of those diseases, as the stethoscope is for that of pulmonary and cardiac affections. The great work of Zander is too learned and elaborate for most physicians, and a moderately sized book which furnishes a clear and concise description of the instrument, how it is to be used, and what is to be observed with it, by one who is himself experienced in its employment, was really wanted, and this want the author of the volume before us has well supplied; it is what he designed it to be, a very clear and useful "introductory guide to the study of the diseases within the eyeball."

The volume comprises twelve lectures. The first is devoted to an account of the theory and principles of the ophthalmoscope; focal illumination; Cumming's and Helmholtz's discoveries; reversed and erect images.

In the second is given a description of the construction and of the several forms of the ophthalmoscope. The author prefers Liebreich's hand ophthalmoscope as the simplest, most convenient, and most practical of all instruments, in which we agree with him, but prefer one of larger diameter than that which he figures.

The third lecture is devoted to the consideration of the parts seen by the ophthalmoscope—the fundus and the vitreous humour.

The fourth lecture contains an account of the mode of examining the eye with the ophthalmoscope, also of the means of illumination and a description of the normal appearance of the fundus.

In lecture five we are furnished with an excellent account of the anomalies of refraction and accommodation which have of late years attracted so much attention, also of myopia, hypermetropia, presbyopia, and astigmatism.

The sixth lecture is devoted to a description of the vitreous humour in health, and to an account of its diseases. Under the latter will be found interesting descriptions of hyalitis, opacities of the vitreous humour, effusions of blood into it, synchisis, synchisis scintillans, foreign bodies and entozoa in it, tumours extending into it, and its atrophic degeneration. The account of muscæ volitantes, an affection of such frequent occurrence, and which often gives nervous patients great uneasiness, is excellent, and as its nature and significance are not so generally understood as they ought to be, we are induced to transfer this description to our pages.

"The abnormal appearances most frequently met with in the vitreous are the so-called *muscæ volitantes;* these appear to the affected individual of the most diverse shapes and varied sizes; small, circular black dots, plain or with a nebulous halo round them or light in the centre; or tailed black objects like a comma (,); these spots may be single or numerous, and may have a certain determinate motion up and down or may revolve round each other, the muscæ may also be in the shape of a gauze-like film or mist, plain or spotted; of elongated lines or streaks, or beaded threads; or a dark irregular mass of greater or less magnitude; they may have a fixed position, but usually they move about, either in a certain definite traject or irregularly; as a rule they are only seen when the lids are open, and when looking at a white surface, at the sky or at light; sometimes they can only be seen in certain positions of the eye and when sought for; in other instances they occur in all positions and movements of the eye. A very common complaint is that of a small black spot floating in the peripheral portions of the field of vision; the affected individual, thinking, on the first appearance of the spot, that it is a particle of dust floating in the air, or a fly (hence the name *myodesopsia* from μυῖα, a fly, and ὄψις, vision; visus muscarum), puts up his hand to brush it away, but finding it still persistent after various such attempts, becomes often not a little alarmed. When we are consulted about these phenomena we should always dilate the pupil fully and make a very careful examination of the lens and the interior of the eye before pronouncing an opinion respecting them. When the parts in front of the vitreous are transparent, we are able in a great number of cases to see these muscæ; the ophthalmoscope mirror being used alone and the affected eye made to move quickly in different directions, the dark object is seen to float into the bright illumined field, and then to disappear slowly or rapidly; it may even remain stationary for a time, and then sink down. These floating bodies generally arise from the sides or bottom of the vitreous chamber in the movements of the eye, and appear by their direct examination with transmitted light as more or less dark opaque objects very often corresponding to the patient's description of them; by incident light with oblique illumination they appear often of their natural grayish colour. Sometimes extensive masses of membranous opacities float about in the humour almost constantly, which would mechanically interfere considerably with vision, were there even no disease in the other structures; indeed I have seen persons who during the temporary and occasional subsidence of such floating bodies could see pretty distinctly, and who would become almost blind the next minute from these objects ascending and intercepting the rays, and causing symptoms not unlike those of detached retina. The fundus may be normal and wholly visible, or these bodies may prevent its being distinctly or entirely seen; or it may be, as is frequently the case, diseased. These floating bodies consist of broken-down hyaloid membrane, or proliferation membranes, or fibrinous remains of blood clots, or effusion products from the choroid and ciliary tract. Simple floating spots are a very common precursor of cataract, or accompaniment of that disease in its early stage; when the cataract has fully formed they disappear, because they are invisible against the dark opaque lens; when the lens is removed and light once more admitted they frequently again become visible; they also arise from congestion, from overwork or straining of the eye. I have known them arise in persons, possibly predisposed to them, who worked much at the microscope, the ophthalmoscope, or the telescope; the large floating masses are often exudation membranes, due to choroiditis; they have frequently a thick black border, and diminish gradually into a thin semi-to transparent cobweb-like membrane. Muscæ volitantes are often attributable gastric derangements, but as they are merely temporary and passing, and are not due to any defect in the vitreous humour, we should be slow in attributing muscæ to disorders of the stomach, as is so frequently done; we are too prone indeed to ignorantly father on the stomach, symptoms, which owe their origin to morbid processes in some other organ. Muscæ occur at all periods of life, and may often remain unaltered, without any further complication, or without any impairment of vision beyond the temporary and mechanical one. To nervous and timid persons they are a source of great annoyance and mental anxiety; the defect is always present, not only to their mind's eye, but literally to their bodily eye; they are constantly thinking of it, and incessantly looking for it and regarding it. I have known such persons go from one practitioner to another seeking for a cure, and finally fall into the hands of nostrum-mongers and quacks."

The optic nerve, its congenital peculiarities and diseases, the acuity and field of vision, are the subjects of the seventh lecture.

In lectures eight and nine the author treats with ability of the retina and its congenital peculiarities and diseases.

Lectures ten and eleven are devoted to the consideration of the choroid, its congenital peculiarities and diseases, myopia, panophthalmitis and sympathetic ophthalmia.

The twelfth and last lecture furnishes a very good account of glaucoma, formerly, that great puzzle to ophthalmic surgeons, but few agreeing even what was meant by the term. The ophthalmoscope has thrown a flood of light upon this disease, and enables us now to refer it to a definite pathological condition.

We commend this work to practitioners who have not the time or disposition to study the scientific and elaborate work of Zander, and who yet may desire more information than they can get from the handy-book of Laurence and Moon, or from the general treatises on the diseases of the eye ordinarily accessible. It has supplied, we conceive, a desideratum in our medical literature.

ART. XXIX.—*Electro-Physiology and Therapeutics; being a Study of the Electrical and other Physical Phenomena of the Muscular and other Systems during Health and Disease, including the Phenomena of the Electrical Fishes.* By CHARLES E. MORGAN, A. B., M. D. 8vo. pp. xvi., 714. New York: Wm. Wood & Co., 1868.

THIS large volume is a posthumous publication. "The death of the author," says Dr. Hammond, under whose supervision it is brought out, "soon after the completion of his work, and before it went to press, has prevented him giving it that careful revisal which almost all abstruse treatises require previous to their publication." We regret that Dr. Hammond has confined his connection with the book to a mere correction of the proof-sheets, for we cannot but think that it would have been advantageous for all parties had that careful supervision, which the author was unhappily prevented from bestowing, been in a measure at least supplied by the editor.

The work, though very voluminous, is to a certain extent fragmentary, for the discussion of the therapeutical application of electricity, or, as the author terms it, "electrotherapy," occupies but a very small portion of the whole.

There is unquestionably an immense amount of information embodied in these pages, and the writer, we doubt not, was thoroughly conversant with all the ramifications of his subject; yet his style is so obscure and involved, and the facts which he announces are presented in such a confused and unattractive manner, that while his readers will be few, those that read understandingly and with profit to themselves will be still fewer.

The melancholy event which removed the author from this world before the appearance of his learned treatise, of course places that treatise beyond the reach of such criticism as would legitimately deal with the work of a living writer. Hence, when we have announced the publication of this volume and indicated its general scope and tendency, our pen is arrested and we can go no further.

We may mention among the chapters which we have found most interesting, the twentieth, which treats of the effect of dying on the muscular current, of rigor mortis and its causes, and the effects respectively of heat, cold, narcotic poisons, and corrosive liquids.

As we have said before, there is a great deal in this book, and a great deal that is very valuable; the peculiarities of the author's style are accounted for by Dr. Hammond, by the fact of Dr. Morgan's long residence in Germany.

We cannot commend the publishers for the manner in which they have per-